Vol. XI. No. 9 DECEMBER, 1917

DEC 8 1917
UNIV. OF MICH. LIBRARY

The Playground

Riverside, Cal.

A LIVING CHRISTMAS TREE

Fifty Cents a Copy Two Dollars a Year

The Playground

Published monthly at Cooperstown, New York
for the
Playground and Recreation Association of America
1 Madison Avenue, New York City

Membership

Any person contributing five dollars or more shall be a member of the Association for the ensuing year

TABLE OF CONTENTS

	PAGE
The World at Play	433
A Living Christmas Tree	441
The Community Christmas Celebration	442
Recreation in Industry. III, by *Charles Frederick Weller*	444
Stadiums	448
Surfacing	454
Suggestions for the Construction of a Regulation Baseball Field, by *A. E. Metzdorf*	454
Suggestions for the Construction of Clay Tennis Courts, by *A. E. Metzdorf*	457
Wading Pools	460
Regarding Apparatus	463
Training Classes for Play Leaders	466

Entered as second-class matter August 8, 1916, at the Post Office at Cooperstown, New York, under the act of March 3, 1879

The Victrola and Victor Records

can bring to your school all the happiness of the Christmas season, and countless benefits, in pleasure and instruction, for every other school day of the year.

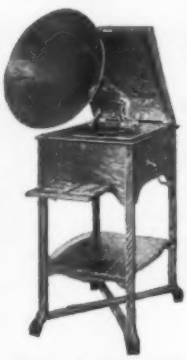
Have you a copy of "Pan and His Pipes," by Catherine Dunlap Cather? This little booklet of ten stories about music and its beginning is an appropriate Christmas book, and should be on the desk of all teachers for the story telling period. (Price 35 cents at all Victor dealers)

Here are a few Christmas suggestions of Victor Records for your school:

45145 10 in. $1.00
- **Holy Night** (Adam) **Marsh and Lyric Quartet**
- **Silent Night** (Gruber) (*with Organ and Chimes*) **Lyric Quartet**

35499 12 in. $1.25
- **Messiah**–Pastoral Symphony (Handel) **Victor Concert Orchestra** (2) **Messiah**–Glory to God (Handel) **Victor Mixed Chorus**
- **Messiah**–And the Glory of the Lord (Handel) **Victor Mixed Chorus**

45144 10 in. $1.00
- **Messiah**–He Shall Feed His Flock **Elsie Baker**
- **Messiah**–Come Unto Me **Lucy Marsh**



Victrola XXV, $75 specially manufactured for School use

When the Victrola is not in use, the horn can be placed under the instrument safe and secure from danger, and the cabinet can be locked to protect it from dust and promiscuous use by irresponsible people.

17647 10 in. 75c
- **Nazareth** (Gounod) **Lyric Quartet**
- **First Nowell** (*Old Christmas Carol*) **Lyric Quartet**

35418 12 in. $1.25
- **The Night Before Christmas** (Moore) **Cora Mel Patten**
- **The Gingerbread Boy** (*Old Folk Tale*) **Georgene Faulkner**

35594 12 in. $1.25
- **Angels from the Realms of Glory** (Montgomery-Smart) **Trinity Choir**
- **Oh, Little Town of Bethlehem** (Phillips Brooks) **Trinity Choir**

31873 12 in. $1.00
- **Christmas Songs and Carols** ("Christians, Awake," "Oh, Little Town of Bethlehem," "God Rest You, Merry Gentlemen," "The First Nowell," "Silent Night") **Victor Mixed Chorus**

31770 12 in. $1.00
- **Messiah**–Hallelujah Chorus (Handel) **Victor Chorus and Sousa's Band**

17869 10 in. 75c
- **Merry Christmas** (2) **Sleighing Song** (Riley-Gaynor) **Olive Kline**
- **Around the Christmas Tree** (*Old Swedish Folk-Song*) (2) **Little Christmas Shoes** **Elsie Baker**

35566 12 in. $1.25
- **Scrooge**–Part 1–"**Marley's Ghost**" **William Sterling Battis**
- **Scrooge**–Part 2–"**The Ghost of Christmas Past**" (*Monologue arranged from "A Christmas Carol"*) (Dickens) **William Sterling Battis**

35567 12 in. $1.25
- **Scrooge**–Part 3–"**The Ghost of Christmas Present**" **William Sterling Battis**
- **Scrooge**–Part 4–"**The Ghost of Christmas to Come**" (*Monologue arranged from "A Christmas Carol"*) (Dickens) **William Sterling Battis**

60080 10 in. 75c
- **Babes in Toyland**–The Toymaker's Shop (Herbert) (Christmas record made especially for the children) **Victor Herbert's Orchestra**

Hear these Victor Records at any Victor dealer's. For further information, write to the

Educational Department
Victor Talking Machine Co.
Camden, N. J.

Victor

The Community Chorus, New York City, winter and summer, indoors and out, in public halls and parks, sings together for the joy of singing and what singing can do to awaken and inspire the community spirit. There are generally almost as many men as women and every age is represented.

A Playground for Java.—C. M. Goethe writes in *The Survey:* "A letter has just reached me from my correspondent in Java, James Etty. He has been receiving regularly *The Survey* and THE PLAYGROUND. He writes, 'I have great pleasure in stating that our place is getting its playground.' He then modestly adds that, while he did not take an active part in it, 'I think the many times I spoke about your American playground movement must to have helped to level the paths.'

"It is just these beginnings all over the world, promoted by just such articles as appeared in *The Survey* and in THE PLAYGROUND that are leading to a broader internationalism and helping to make the way for a better understanding and a more lasting peace in the future."

Mr. Goethe writes that he has received a copy of the grant of 600 rupees from India toward the Lee Memorial Playground, one of the first municipal appropriations in India. "Once the people own the playground they take an interest which otherwise is impossible."

Carry On.—"China needs playgrounds tremendously and the biggest help we can get in proving that to the people to whom we must look for support and maintenance is the proof of their necessity and high value in America. May you enjoy the greatest success in your propaganda, not only for the good you will do America, but for the great good you will send on to the Orient as well."—Extract from letter of Frank Eckerson, Tong-An District of the Amoy Mission, Tong-An, Amoy, China

A "Macedonian" Cry from Russia. — Xenphon Kalamatiano, a progressive Russian who has been educated in this country, now sends the following urgent appeal through the American Consulate in Moscow:

"In connection with the various changes which are taking place in Russia as a result of the revolution, there is growing interest in the reconstruction of the school system, with a special view towards paying more attention to the physical training of the students, which up to the present time has been almost entirely neglected.

"As a graduate of American schools I have been asked by a new Union of Parents to pro-

cure such assistance from the States as possible to help in the preparation of a new program for establishing schools more or less on the American plan.

"What is desired is literature describing American grade and high schools, with as much detail as possible, especially if possible the steps taken to insure hygienic surroundings, the system of gymnasiums and gymnasium work, also descriptions of the various field sports and how they are of assistance in the general training of the scholars.

"The new Union also would like to get in touch with institutions which in the States furnish schools with supplies such as pencils, paper, notebooks; also supplies for gymnasium and sport; as also school furniture of all kinds.

"I trust that this request may find you interested and that the office of the Union of Parents may receive literature and possibly be placed in touch with organizations that may be helpful to it."

Graham R. Taylor who sent us this letter adds: "This is only one of a multitude of ways in which America can be of inestimable service to Russia in this most critical period of her national development. It is a thrilling time to be here —and has been such all of the past year. I am anxious to get back home and see all my friends and tell them what is going on here and about the experiences I have had. But I cannot break out just yet, and even when I do come back I know I shall feel like keeping in the closest touch possible with affairs here, and perhaps coming back here."

Community Buildings in Small Towns. — Sheboygan, Wisconsin; Coldwater, Kansas, and Russell, Kansas, are among the towns reporting new community buildings. Sheboygan has bowling alleys, billiard tables, dancing, and gymnasium and storytelling classes for the younger children, all under the direction of a paid worker.

Coldwater provides stage and four club-rooms, two shower-baths, library, reading-room and rest-room.

Russell built its Community Hall at a cost of about $3,000 by selling shares at five dollars each. It stands on land owned by the city, which also provides tennis, hand-ball and tether-ball facilities besides some playground apparatus. Community singing and a series of musical and dramatic entertainments will be held in the Hall.

Pooling Interests. — Cedar Springs, Michigan, in an effort to solve the rural community problem has established a community center in a building formerly occupied by the Congregational church. The work is controlled by the Board of Education. The superintendent of schools, Mr. J. E. Luiden, in writing of the work says: "The school does not pay a cent toward maintaining the activities, as the motion pictures meet the bulk of the bills. The other activities pay their own way with the help of concerts.

"These activities include a library of 1,000 volumes, a dramatic club of twelve, an orchestra of twenty-five, and a chorus now organizing for a second season. Motion pictures are given twice a week, a home school association is flourishing and plans are being laid for a winter Chautauqua.

"Each organization has its own officers, but the superintendent of schools is ex-officio a director in all of them, thus unifying and building up all interests from an educational standpoint. This eliminates local politics and petty personalities, while enabling each society to feel itself responsible for its own success.

"To clinch matters this year, we also plan a Community Clearing Council, to act as an advisory committee to assist the Board of Education and the Superintendent in securing the best interests of the community. The council is to be composed of about twenty-five public-spirited citizens of both sexes, representing a dozen communities and public enterprises. This will help develop public sentiment, keep close tab on any untoward developments, sense new needs and suggest new solutions, besides unifying the town."

Making Use of a Run-down Church.—Earlville, Illinois, is using two lots and an old church building for basket-ball, Boy Scouts, Mothers' Clubs and other interesting gatherings.

Interest in Gardening in South Bend, Indiana.—Nearly 4500 registered in the Home Garden Contest, while 457 received vacant lot gardens directly from the director of gardens of the municipal recreation system. The number reached about a thousand including lots granted by Oliver, Studebaker and other large industrial plants. The annual Flower and Vegetable Show was held at the Inter-State Fair.

A Miniature Olympiad.—

Over one thousand boys competed in New York City on Labor Day for the Public Park Playground Athletic and Recreation League Championship. Every race which goes to make up a cosmopolitan city was represented. Winners in each of the ten events received gold, silver or bronze medals and the playground winning the championship, a silver cup—all presented by the New York Evening Mail.

A Scale for Grading Neighborhood Conditions.—It is published by the Whittier State School, Whittier, California. It includes playground facilities, institutions and establishments, social status of residents.

Dramatic Courses at Columbia.—Columbia University is to have two very significant courses in the training of leaders of dramatic play. That given by Emma Sheridan Fry on Principles of Educational Dramatics will serve as a foundation for the more specialized course given by eminent lecturers, conducted by the Children's Educational Theatre. Full information regarding these courses may be secured from the Director of Extension Teaching, Columbia University.

Musical Baseball.—West New York, New Jersey, ran a municipal baseball series with semi-professional teams, charging for seats but not for admittance. The profit of nearly three thousand dollars was used for free band concerts to the number of fifteen.

Food Conservation for Schools.—The United States Food Administration will issue each school month a bulletin of family and civic economics prepared under the direction of Charles H. Judd, Dean of the School of Education of the University of Chicago. These lessons are intended to stimulate closer cooperation between the school and the community in solving the problem of our democracy.

Enthusiastic cooperation was extended by all the summer schools of the country in carrying the messages of the Food Administration to their students, who, as teachers, have infinite possibilities of influencing "the food habits of the one hundred million of our people."

Inter-State Character Education Methods Research.—The National Institution for Moral Instruction is offering a prize of $20,000 for the best method of Character Education in the public schools of the United States. In 1916, a competition for a prize of $5000 was

conducted for the best "Children's Code of Morals." Nine collaborators from each state may be appointed to work out the proposed system. Only one plan from each state will be eligible. Further information may be secured from the Institution, 3730 McKinley Street, N. W., Washington, D. C.

Boys' Clubs Annual Meeting.—The Boys' Club Federation held its eleventh annual conference in Buffalo, with 114 delegates present, representing sixty organizations. The Older Boys' section voted to raise one-fourth of the expense for a field secretary for the far west. One of the memorable events was the lighting of eleven candles upon a huge birthday cake symbolizing the eleven years of the Federation. The candles were lighted in a darkened room by Older Boy delegates with a torch which the president hands on from year to year to his successor as a symbol of the lighting of new beacon fires in the form of boys' clubs throughout the land. Among the speakers were Irving Bacheller, Ernest K. Coulter and James A. Wilder, the last from Honolulu.

Dedication of McGolrick Recreation Field.—William E. Harmon, speaking at the dedication services at McGolrick Recreation Field, in New York city, urged young Catholics there present to make the occasion the starting point for nation-wide propaganda for the establishment of playgrounds by Catholic parishes. Mr. Harmon spoke in part as follows:

"I wonder how many of us here today realize the meaning of this recreation field we are about to dedicate. I wonder how many are thinking of the part it is to play in this section of the great City of New York?

"Scarcely a day will pass but that a new child will enter for the first time its welcoming gates, to take possession of it, and to have it for his very own for five, or perhaps, even ten years.

"About the time our dear Lord was born, nearly two thousand years ago an open space in the Imperial City of Rome was set aside for a park or market place. Today it is still in use, and children have gained health and strength from its grassy turf, and in its cooling shadows for sixty generations.

"About one thousand years ago a London manufacturer gave a few acres of ground ly-

ing between his house and his small factory upon condition that a path should be kept open between the two buildings for all time. While the very name of that man has, in the passage of the centuries, become a question of history, so my informant told me, the City of London has kept the path open traversing the park in a curious criss-cross way, and on the night I was there, in the middle of a spell of extreme heat, I saw not less than five hundred men, women and children stretched out asleep under the stars.

"I speak of these things because I want you to see what great work has been done for you and your children, and your children's children by your beloved Pastor, I also want you to try to realize a far greater significance in the promise that this playground gives to other Catholic parishes, the inspiration that it will give to other spiritual leaders who are concerned with the health of the body in connection with the health of the soul, and the hope that it will bring to the mothers and fathers of children in other places where our work may be duplicated. I trust with God's aid to sow under ground, watered by your Pastor's love, seed that will multiply a hundredfold from the dedication of this day.

"A few years ago while riding on the Twentieth Century train to Chicago, I became interested in a discussion of philanthropies. The question at issue was, What form of gift to the public would be most likely to become a permanent or perpetual benefaction? The gentlemen were men of wide experience and broad education, and many were the suggestions made, and many were the cogent arguments scored against them. When libraries were proposed, the point was made that books wore out, and buildings must be kept up with fresh money. Hospitals performed their wonderful service to the public, but under the same handicap. Educational institutions became sluggish and out of step with progress, unless refreshed by new blood. Endowments are subject to theft or misuse. Even churches decay or moulder from ravages of time. Land, naked land, was found to be the only form of a public gift that stood the test of years of decay or misuse. Land is always where God put it—ready to serve his children, whenever men are wise enough to put it to good use. It may be made to serve

evil ends, but of itself it is uncontaminated."

Putting New Life into the Community. — Word comes from a small community in New York of the work of one man, a minister, in helping his young folks to rich, happy lives. He desired more modern facilities for work with his young people.

"Only chloroform could be the means of separating his pews from their dollars. He was big enough to undertake physical directing in a gymnasium for the village in order to keep his little flock. Well, it does seem as though the Lord had raised him up! I understand that he is to be made a member of the school faculty another year with a regular salary—he's doing it all gratis now—directing the training of his 400 pupils, except that one teacher has the girls from 16 to 18. He is an Englishman, son of an officer, and has had good previous work along this line I judge—clean, enthusiastic, well-educated. I do not dare to put into words the things I hope he may do for us. Our men's social club at their annual picnic raised $200 for starting the gynasium. He rented the skating rink and fitted it up for a gynasium. He has classes every day excepting Friday and Saturday. He is a scoutmaster into the bargain and the boys meet there, regularly. He had them camping for two weeks during the summer.

"I had been very much discouraged during the year just after I made my master effort. I had sifted to the last ounce I was able and it seemed a last effort. But it has just begun to blossom. Roots must have been growing in the dark. The business men have joined with the Grange to establish a fine rest-room, a place so much needed in a rural community. They provide all the late periodicals and papers, have a comfortable place for farmers to bring their luncheon and to eat it, a toilet and lavatory. Just what we needed. Saturday nights this summer the pavement has been swept clean and dusted over with cornmeal and after the band concert, the town has danced, the village president being floor-manager. Some of the ministers have looked for the heavens to fall but on the contrary I seemed to see the stars twinkle a bit more gaily, sure am I the get-together spirit is manifesting itself and the wave is going to be so strong that even the ministers will be swept on with it. My enthusiasm, so

crushed, is reviving and I begin to get the vision again."

Playshed for Winter.—"Bluefield, West Virginia, has a gymnasium for winter sports 40 x80 feet. It might be called a playshed yet can be warmed, has pine floor and porch nine feet wide running all around for running track and roller skating. Shower baths below."

Municipal Golf Club House.—The Racine, Wisconsin, municipal golf clubhouse contains a heating and hot-water plant with baths, dressing-rooms for men and women, storage-room, and office, as well as a refectory and dining-room and a clubroom.

Racine has given up the concession system and the refectory service is now handled directly by the Park Board. "Better and increased service" is the report under the new system.

The Park Department municipal Chautauqua, was a success financially and every other way and the department plans to repeat it. The Ben Greet players give an annual performance in one of the parks.

Socialized High School in Eveleth, Minnesota.—The Eveleth high school building cost $175,000 and contains two swimming pools 20x60 feet, showers and lockers, a gymnasium 50x110 feet, with dressing-rooms and an office for the directors. A large auditorium with movable seats and a stage between the gymnasium and the auditorium make a building which, from the standpoint of recreation, is one of the most complete in the United States.

Since the high school is to have two swimming-pools, the municipality has given up its plan of a natatorium and has built instead a curling and skating rink. The curling rink is on the first floor of the building and the skating rink on the second.

The schools at Eveleth have established a system of physical training based upon play. This includes class-rooms and gymnasium activities with play with a play leader during recess and after school. In the evening there is indoor recreation conducted for the older children. The night school for foreigners has community singing. A teachers' training class in plays, games, folk dancing, and calisthenics was conducted during the winter of 1915-16.

A municipal bathing beach has been established at Ely Lake. The Board of Educa-

tion maintains a bus line from the city to the beach. Children are carried free. There is a small charge for adults. Supervision at the bathing beach was also provided by the Board of Education.

From Virginia, Minnesota.—By vote of the people the council appropriation for municipal music was increased from $2000 to $3500. The new city hall is to be used as a municipal recreation center as well as for administrative purposes.

A LIVING CHRISTMAS TREE

For four years a communal service has been held on Christmas night in the city park of Riverside, Cal., and the death of no growing thing has been necessary to commemorate the birth of Jesus. No monarch of the forests nor of the mountains is cut down for this one night to have its sap drawn for years from unseen reservoirs gradually dried up. No! Riverside decorates with tinsel and spangles, gay ornaments and pure white ribbons a magnificent living cypress which towers symmetrically for eighty feet into the dark blue sky that glitters with millions of stars which the tree's solitary star crown emulates. Riverside, located as it is in the southern part of California, has been chosen by one of the big circuses as a winter quarters. With this circus available, why not, came the thought to the originator of the Community Christmas Tree, revive the memory of the old-world animals chewing the cud of idleness in their open fields. Accordingly a procession is formed each Christmas night several squares from the park and floats are prepared to add to the festivities; then, marching as solemnly as if they were carrying the Three Wise Men of Old and passing through rows of applauding thousands, the camels, elephants and Arabian horses lead the festal procession through the orange-bowered city which nestles in the Sierras as did the hamlet in Judea lie in the hollow of its hills so long ago.

And as they turn through the rose-covered gates and approach the glittering tree a message radiates through all its branches "Joy to the World." Then the Spirit of Christmas, impersonated by a young girl who is drawn to her throne in the tree on a lovely chariot, glides to her place amid the welcome from the trumpets, the brasses, the viols and the voices of thousands.

Once again the jeweled lights flash out, carols are sung and a tender hush comes when a simple prayer is made by a gentle old man ending in the Lord's Prayer in which all join. And the old tree rustles, whispering to itself.

THE COMMUNITY CHRISTMAS CELEBRATION

Now is the time to plan your community Christmas. Here are a few suggestions from last year's celebrations that may be helpful.

As the clock in the Metropolitan tower struck six o'clock the day after Christmas, the thousands of lights on the Municipal Christmas Tree in Madison Square were switched on and the great pine became indeed a "Tree of Light" and color, topped by the brillant white "Star of the East." A short distance to the north of the tree a large electric sign blazed forth the Christmas message, "Peace on Earth, to Men Good Will."

Within a few moments after the lights were turned on, an interested crowd had gathered to gaze at the tree and by seven-thirty the paths around the tree and the singers' stand were filled with people. The Community Chorus led in the singing of *America, Silent Night, Holy Night, The Christmas Tree Carol* and *Come All Ye Faithful.* At seven-forty singing Arthur Farwell's *March, March,* the chorus proceeded to Madison Square Garden through a moving aisle formed by Boy Scouts with their staffs held horizontally at their sides.

A large crowd had already gathered in the hall and people continued to pour in until not only the balconies and boxes were filled but also the 1500 or more chairs which had been placed on the main floor. The audience was an unusually democratic one, men and women of every class and nationality sitting side by side.

"An audience typical of New York it surely was. Women from the tenements with shawls over their heads hurried along side by side with women in opera cloaks. An old white-haired man with one empty sleeve, plainly a Civil War veteran, followed some cherry cheeked high school girls. An old negro crept in and asked if there was a seat for him, receiving the hearty answer, 'Seats for all.'

"Mothers with their sons, young men just back from the

border, in khaki, fathers and mothers with their little children, rich and poor, richly clad and shabby, young and old, all came hurrying in together.

"There were blind people, led by their friends. There were deaf men and women, wearing contrivances for hearing at their ears. There were lame people, limping eagerly along.

"If any element preponderated it was citizens with cheap clothes and dark, intent faces, music loving Italians and Russian Jews from the East Side."

The platform for the Community Chorus erected at the east end of the hall was banked with evergreens in front and at the sides. The singers, said to be one thousand in number, were of all ages from little girls with curls hanging down their backs to white-haired men and women. All of the women in the chorus wore white. The orchestra which played the accompaniments numbered about ninety pieces. Harry Barnhart directed the singing of *The Messiah* by the Chorus and familiar hymns by all.

The audience seemed a little timid about letting out their voices at first but soon they forgot themselves in the songs which they were singing and made the place ring with the well-known carols and hymns.

Comparatively very few of the audience left before the last hymn had been sung. The audience stood during the singing of the impressive *Hallelujah Chorus.*

One could but feel that a true Christmas spirit reigned supreme in the hearts of the great throng that took part in this celebration.

At the community Christmas tree in Harlem, arranged by the Harlem Council of Women, in Mount Morris Park, the Harlem Young Women's Christian Association gave the pageant of the Nativity on Christmas night. Costumes were borrowed from local churches and other organizations. The lights from the tree and a spot-light provided the illumination. The actors, following the light, came down the hill to the manger, where they presented their gifts and sang carols. Many had felt that the program for Christmas night was unimportant as most people would have home interests, but the attendance and appreciation fully justified the efforts of the Y. W. C. A. Other organizations had charge of other nights, in turn.

The children of the parks, playgrounds and gymnasium under the Department of Parks celebrated Christmas and their annual

exhibit of their work during the week with a playlet, *Father Time and His Children,* followed by general dancing.

The program of the South Bend, Indiana, Christmas tree celebration consisted of carols and seven living pictures of scenes of the Nativity.

Los Angeles conducted a series of Christmas festivals, ending with a particularly gay occasion in the old Plaza, where a program of Mexican and Spanish songs and dances roused these warm-blooded foreigners to great enthusiasm.

RECREATION IN INDUSTRY

CHARLES FREDERICK WELLER, Associate Secretary, Playground and Recreation Association of America, Chicago, Illinois

(Continued from September)

VIII. SOCIAL SERVICE

In one of the smallest of the Northern Range Towns of Minnesota, I talked with an assistant superintendent of important mining interests. He came to this little, isolated settlement, some fifteen years ago, as a young man, a cultured college graduate. He told me that the desolation, the utter loneliness and dullness of his position, was so overwhelming that, for a long time, he was constantly on the verge of deserting the industry and fleeing to a more congenial fellowship. He did not "break-loose" into dissipation, as many workers do, but it is probable that something vital has been killed in that man—and in scores or hundreds of others, who appear to have "made good" as industrial leaders, but have really murdered some of their richest potential powers.

From the librarian at Virginia, Minnesota, I learned such pathetic stories of life-hunger among industrial workers and their families as would surely stir to action the noble-minded leaders of those great iron mines, if they could understand somewhat more adequately the human elements of their mammoth industrial machines.

Foreign-born women, especially, linger shyly around the librarian's desk, seeking eagerly for some excuse for just talking to some one. Weeks drag along with no opportunity to talk with any human being about anything but the grim toil of the man's industry

and his sleeping-eating place. These women are sometimes desperately lonely. They feel that "nobody cares." They have no place, no human usefulness, no community consciousness; no sense of thier own function and value among their fellows. Their souls starve for fellowship—which organized recreations could give.

IX. Modern Civilization's Two Pitfalls

But, why should industries lead, or share vigorously, in the solution of the leisure-time problem? Because industries have become the main determinants of social thought and action.

Not only has the influence of our industries grown mightily, but their characteristics have greatly changed. Even since I was a laboring man—in 1889 and '90 at Swift's slaughter house in the Chicago Stock Yards—there have been large alterations in industrial, social conceptions. And the rapidity of the changing movement increases constantly. Five years in the twentieth century bring us farther forward than fifty in the nineteenth or five hundred in earlier periods.

Therefore, it is vitally important that our industrial leaders should apprehend two dangers which threaten modern civilization:—

One danger is that the characteristic modern emphasis upon material standards, upon *conditions*, will not be corrected or controlled by an adequate emphasis upon *activities*, upon life itself. My whole discussion of recreation deals obviously with this theme—which was expressed in the first of the two results promised from recreation activities in industry, namely the increase of productive power—of efficiency. We are constantly forgetting that life is more than meat or raiment.

The second danger is that those who now control our industries will be so slow in realizing and expressing the growing, general sense of brotherhood, of democracy, that people will become impatient and incline, sweepingly, towards class hatred and class warfare. To this theme is related the second of the two promised results of recreation, namely the development of team play, of cooperation—a spirit of united endeavor.

Nothing is more democratic than play. Team mates in an earnest sport forget all class distinctions. If you have played good games with others you feel a glow of friendly fellowship for them.

Eleventh Conclusion:

The unifying power of recreation can be applied in industries to

lessen class antagonisms and to develop cooperation. The spirit and detailed suggestions of preceding paragraphs have been expressed inadequately if this democratic, unifying power of recreation has not, throughout, been indicated.

Community Movements

One of the greatest services an industrial leader can render in any community is to help develop a public recreation system to be sustained by public taxes. Greater than giving outright to the community a Young Men's Christian Association or any other recreation institutiion would be the giving of such leadership as will enable the community, itself to develop and maintain its own institutions.

Here, I am suggesting a new subject—the relating of an industry to the whole, independent community in which the industry is placed. All my preceding paragraphs have dealt with a single industry, suggesting recreation activities which that industry should develop for its own employees and their families. Now, I turn to speak, very briefly, of the general public—the whole surrounding community, be it large or small.

To be specific;—let the directors of an industry, or a group of industrial leaders, in "Exville," say to the Playground and Recreation Association of America;— "Up to $2,000 we will pay the actual cost, (about $136 weekly) of having one of your expert field secretaries do four things for Exville, namely;—

(1) Study Exville

(2) Plan an appropriate system of playgrounds and recreation centers

(3) Enlist school, park, and city authorities to conduct them, and

(4) Return often enough to get the activities successfully established, under competent playleaders."

Such a gift to the community would do more than create a single Young* Men's Christian Association;—it would develop Young Men's Christian Association methods, at public expense, and for all the people, in several public schools. It would be better than buying one ten-thousand-dollar playground;—for it would lead the community to buy playgrounds for all its schools and to develop play in all its parks. It would be more surely permanent and more

*This is not to criticise or belittle the Y. M. C. A.—an altogether admirable institution which deserves to be even more generously and generally supported than at present. It is named here to make my suggestion specific and forceful.

broadly democratic than any philanthropy, however noble-spirited;—for it would develop the unfailing springs of power of all the people.

Such a gift from the industrial leaders of a town or city would be like "water to flush the pump";—for it would assure a steady, growing stream of popular interest and public support. This is not theory. It has been demonstrated in many communities—small and large—where sufficient funds have been assured to enable one of the field secretaries of this National Association to work from two weeks to three or four months, as needed, in each place.

On this subject of moving whole communities to develop public recreation institutions, adequate information may be had by any inquirer. I must return now to the immediate subject, "Recreation in Industries"—within the industries themselves.

X. Two General Conclusions Summarized

To an open-minded man, who is trying to read the signs of the times, I believe the preceding pages will suggest that:—

(1) Appropriate recreation activities can be developed in industrial plants as an important means of conserving and increasing productive power and of strengthening the spirit of cooperative unity.

(2) Everything depends upon the recreation leader employed and the specific plans developed for each distinct industrial establishment. There is little use in going about it in a cheap, patent-medicine way.

A "Recreation Engineer" Necessary

Before the local, permanent leader of recreation is employed in any industry there should be called in, for preliminary service, an efficiency organizer or conservation engineer, experienced in the large, specialized field of recreation. He is needed to study the local situation and possibilities, the personnel and resources, and to plan out the recreation program—with as much expert resourcefulness as the Company would naturally employ for the installation of any other important new department.

Such a general industrial field secretary would develop plans for the one industry in the light of experiences in other industries. He would help to discover, to train, and, subsequently, to guide, the permanent recreation leader of the local industry.

Exactly such engineering service or "field service" as this, the Playground and Recreation Association of America has been suc-

cessfully rendering for ten years— not to industrial plants, but to cities and towns wishing to start or to remodel their recreation activities.

XI. The Very First Thing to Be Done

This experienced, efficient "Playground and Recreation Association of America" should now be enabled to offer such organizing, engineering, recreation-planning service to industrial plants.

The Association should also be enabled to carry on preparatory experiments and demonstrations, to study and systematize the experiences of industries in which recreation activities have already been tried, and to search out and develop promising leaders of recreation in these industrial fields.

STADIUMS

In 1914 there were completed stadiums at Harvard, Syracuse, Yale, Princeton, the College of the City of New York, and at Tacoma, Washington. The expenditures for these stadiums totaled $1,895,000. Since 1914 the University of Michigan, Cornell University, the Boys' High School of Louisville, Kentucky, Evansville, Indiana, and San Diego, California, have built stadiums or are building them at the present time. The cost of these stadiums, exclusive of that at the University of Michigan, is $350,000.

Methods of Construction

The methods of construction of stadiums do not vary greatly from two main processes: a stadium is either erected as a complete unit, that is "poured" of concrete or it is made of blocks of reenforced concrete. The stadium at Princeton University was the first to be erected as a monolith. The structure was all poured at once into wooden moulds. The area of the seats is thus self-supporting and the girders, of the same material as the seats, were moulded at the same time. The stadium at the University of Michigan and that at San Diego, California, have been built as monoliths, following the Princeton plan. The stadium at Harvard, built in 1903, is an example of block structure strengthened by twisted steel rods. The stadium of the College of the City of New York is not a monolith but each section of seats carried through to the outer wall is a

unit in itself and the builders were most successful in effacing the cracks which it was feared would be visible on the outer wall. The Yale Bowl varies from any of the above plans in that the ground excavated was used as an embankment which was faced with concrete slabs to make steps. Bars of steel were put just below the break of the steps in order to provide for the settling of the earth. The bowl is thus 27′ above the level of the street and 27′ below it.

The shape of stadiums also follows two plans: In general they are either complete ovals or ovals open at one end. The Yale Bowl, following the plan of the Roman Colosseum, is a complete oval. The stadiums at Tacoma, Washington, San Diego, California, the University of Michigan, Evansville, Indiana, Harvard, and Princeton, are all ovals with an open end after the Greek models. Exceptions to either the Roman or the Greek plan are: The stadium at Cornell which is a straight grandstand running along one side of the field and the stadium of the Louisville Boys' High School which is similar to that already erected at Cornell. Cornell plans the erection of a second building which is to be in the form of a truncated right angle.

In size the stadiums already erected vary from 60,617, the seating capacity of the Yale Bowl, to 4,300, the number accommodated by the Louisville Boys' High School stadium.

Cost

Princeton, Syracuse, and the College of the City of New York have all been given their stadiums by individuals. Cornell's grandstand stadium was also a gift. The cost of the proposed building at Cornell is to be met by alumni subscriptions. The Yale Bowl was built through alumni gifts while Harvard's Athletic Association, aided by a gift of $125,000, provided the funds for the stadium there.

In Louisville, Kentucky and Evansville, Indiana, the stadiums have been built and are owned by the school boards. In Evansville the school board rents the stadium to the Central State Baseball League for seventy days including Sundays during the baseball season. The Board thus realizes $2,000 on the stadium annually. San Diego, California and Tacoma, Washington, secured their stadiums through the interest of the high school students. In Tacoma the amount needed for the stadium—$135,000—was met by private subscription begun by the students themselves. To all persons contributing $10 a ticket good for all stadium performances for the next five years was given. San Diego provided for the cost

of her stadium—$132,752—by a bond issue for park improvements. It is maintained by the Board of Education, which contributes $60 a month for this purpose. The Athletic Association at Princeton had for several years built a temporary grandstand for the big games at a cost for erection and removal of $10,000 annually. The Athletic Association now pays this sum to the Educational Fund of the college. Thus Mr. Palmer's gift of a $300,000 stadium is working as a permanent endowment fund for the institution.

Uses

The stadiums built on the Roman plan cannot be used, as a rule, for as many sports as can those built after the Greek pattern. For example, the Yale Bowl, although enclosing a field 300′ x 500′, is used only for football. It cannot be used for baseball or track. A plan is now on foot to tunnel it so that there may be a straight-away suitable for track purposes. Pageants and Greek plays have been given in the bowl with excellent effect. The Syracuse University stadium also built after the Roman plan has nevertheless a 220-yards running course made possible by piercing tunnels. The track is separated from the set structure by a five-foot space so that track events are visible to all spectators. The straight-away is in front of the grandstand of the stadiums which are complete ovals, that at the College of the City of New York providing for the most activities. There is on the field enclosed a baseball diamond, a football field, a one-fifth mile running track with 450′ straight-away. The stadium has also been used for pageants and Greek plays. This stadium although dedicated to the college is available under the supervision of the faculty to all who care to use it for recreation.

Of the stadiums built on the Greek plan with one end open, that at Princeton, enclosing a field 700′ x 580′ is the largest. This field has space for football, a quarter-mile running track, and a track for field events. Under the stadium building itself is a covered concourse with eight large toilet-rooms. The stadium at Tacoma, also an open oval, encloses a field 400′x390′. It is used for football and track events and is made available for baseball through the fact that the walls flare. This was possible because the stadium was small enough to allow those spectators seated in the farthest tiers to see, even though the walls flare. In the case of larger stadiums, flaring walls would make the distance between the players and the spectators too great.

Cornell's concrete grand stand covers an area 80′ x 700′. An interesting feature of this structure is the space at the top of the grandstand which allows for the parking of 120 automobiles within sight of the games. The grandstand overlooks fifty-seven acres known as the "Playground." Thirty acres of this are unfenced. The balance is fenced and used for track, football, and baseball.

In San Diego, California, the athletic field is 621′ x 287′, allowing for baseball, football, and track events. The stadium at San Diego is in charge of the Park Department. No charge is made for the use of the stadium if admittance to the event is free. If there is an admission fee, the minimum charge is $25 and the maximum one-third of the gross receipts.

The Board of Regents controls the stadium at the University of Michigan, which is not yet complete; one long side of the oval is finished and faces a field of thirty-seven acres on which there are tennis courts in addition to baseball, track, and football facilities. The stadium is at the disposal of the college for pageants and dramatic events and has been so used.

Special Features

The use of a wooden covering for the concrete step is a feature of the Louisville Boys' High School stadium. This covering is high enough in the rear for persons to walk under it and affords comfort as well as protection to the patrons' clothes.There are also fixtures on the building which make possible the erection of a canopy over the spectators in case of rain. The stadium at Evansville, Indiana, has 5,380 seats under cover and 1,400 without cover, known as bleachers. A cement screen built as part of the College of the City of New York stadium runs along the Amsterdam Avenue side of the building where street traffic is heavy and cuts off the noise of the street most effectively. In connection with the stadium at San Diego there is an athletic house which encloses a court for basket ball and general athletics.

STADIUMS

Name and Date	Seating Capacity	Means of Securing	Construction and Cost	Uses and Area of Enclosed Field
Harvard University, Cambridge, Mass. 1903	22,500—with wooden additions 48,000	Athletic Association, $225,000. Class of '79, $125,000	Open at one end. Re-enforced concrete strengthened by twisted steel rods, inclined trusses of steel, slab units. Built July-November. $350,000	230′ x 363′, includes 4-lap running track and football ground
Yale Bowl, New Haven, Conn. 1913-1914	60,617 seats	Alumni donations and also donations from non-graduates	Playfield 27 feet below original level; earth embankment 54 feet high faced with concrete slabs molded in form of steps; bars of steel just below break of steps to provide for settling of the earth $750,000 when finished	Field oval 300 x 500 feet area. Three acres used for football, lacrosse, pageants, opera
Princeton University, Princeton, N. J. 1914	41,000	Gift to college for use of athletic association from Mr. Edgar Palmer. $10,000 paid annually to College Education Fund by athletic association. This amount previously paid for construction and removal of bleachers.	Poured concrete in wooden moulds. Area of seats self-supporting. No steel columns, girders of same materials as rest of building and were moulded with it. Curved end points to west and north. Covered course under building $300,000	580 x 700′ 60′ above playfield; running track; ¼ mile space for field events; 8 large toilet rooms
Syracuse University, Syracuse, N. Y. 1907	20,000 with extra places for 20,000 more	Gift of Mr. John D. Archbold	Built 1905-8. Arched structure to make track. This is separated from set structure by 5′ space so that track events are visible to all spectators, straightaway in front of grandstand	475′ x 670′ enclosed oval. 250,000 cubic yards of ground excavated; 220 yards course made by piercing tunnels
University of City of New York, N. Y. C. 1913	5,880 with space for 1,000 extra	Gift of Mr. Adolph Lewisohn, dedicated to college and available for all who care to use it for recreation under supervision of Director of the Department of Hygiene	Screen of cement along Amsterdam Avenue to cut off noise; structure not a monolith but each section of seats carried through to outer wall is a unit; re-enforced concrete	Baseball diamond, football field, 1-5 mile running track oval shaped with 450′ straightaway
Tacoma, Wash. 1910	30,000	Popular subscription begun by high school students. To every contributor of $10 a ticket good for all stadium events for 5 years is given	Walls flare out to allow for playing baseball. Oval open at one end on Puget Sound $135,000	Football, baseball, and 1-5 mile running track 390′ x 400′

STADIUMS—(Continued)

Name and Date	Seating Capacity	Means of Securing	Construction and Cost	Uses and Area of Enclosed Field
Cornell University, Alumni Field, Ithaca, N. Y., 2 parts (a) complete 1915 (b) planned	(a) 9,000	(a) Memorial gift from children of Jacob Schoelkopf	(a) Concrete grandstand; $80,000 including work on field; place at top of stadium for 120 automobiles; stadium covers area of 80' x 700'	(a) 760 acres football and track; ¼ mile 30' wide, 220 yards straightaway
	(b) 6,500	(b) Alumni subscriptions	(b) $150,00 for improvement of baseball field including $65,000 grandstand in form truncated right angle	
Louisville Boys' High School, Ky. 1916	4,300	School board	$11,000; re-enforced concrete; along one side of school grounds 368 feet long. "One feature is the covering of each step with a wooden bench sufficiently raised in the rear to pass under it. This is to add comfort and prevent the soiling of patrons' clothes by the person seated behind them."	
Evansville, Ind.	Covered, 3,380 Bleachers, 1,400 Total—6,780	Built and owned by school board	$60,000; concrete and steel construction	3 acres; baseball, football, general school athletics. Board of Education leases stadium to Central State Baseball League for 70 days during baseball season for $2,000. Sunday baseball is played upon it.
University of Michigan, Ann Arbor, Mich. (a) completed 1914 (b) planned	(a) 13,200 (b) When completed to seat 52,000		(a) Poured re-enforced concrete; that already built a unit (b) Whole will be horseshoe shape	37.7 acres; gridiron, baseball field, and track; also tennis courts; stadium available for pageants and festivals through permission of Board of Regents and has been so used.
San Diego, Cal. 1914-1915	30,000	Bond issue for park improvement. Board of Education contributes $60 a month toward upkeep.	Horseshoe shape; poured concrete $132,752	Athletic field 287' x 621' baseball, football, track; no charge for use of stadium if admittance is free; if gate admission, minimum charge $25 or 1-3 gross receipts; stadium in charge of Park Department

SURFACING

A study of surfacing on the playgrounds of twenty-six cities visited by a worker of the Playground and Recreation Association of America showed that of two hundred and eighty-two playgrounds, eighty were ungraded and forty-five were unimproved. On sixty-five playgrounds efforts had been made to develop grass surfaces.

Surface Treatment Surface treatment of the remaining one hundred and seventy-one grounds was as follows:

Gravel	47
Cinder and sand	33
Macadam	21
Cinders and clay	17
Cement	16
Sand	15
Brick	8
Clay	5
Tan Bark	5
Slag	2

Cost On a playground 250′ x 350′ cinder surfacing cost $837.34 and the labor $1,150. On a playground where tan bark was used, a two-inch surface of bark was sufficient for a season's use.

SUGGESTIONS FOR THE CONSTRUCTION OF A REGULATION BASEBALL FIELD*

Size In an investigation of the athletic fields of fifty colleges it was found that twenty had ten acres or more, twenty had from five to ten acres, ten had five acres or less. The fields containing over ten acres belonged to the larger colleges and in most cases, parts of the fields were not used.

Surfacing The most important point to be considered in laying out a baseball field is the selection of a plot of

* Drawn up from report of A. E. Metzdorf for Dubuque, Iowa

ground which will lend itself naturally to the game but which will yield as nearly as possible the best natural soil so as to reduce the amount of excavation and handling. The most generally accepted arrangement of strata is a surface soil, a porous stratum, and a retentive stratum for the bottom or deepest layer. In a properly drained athletic field, the first, second and third layers of soil should be arranged in the following order:

Porous
Retentive or impervious
Mixed and thoroughly pervious

A study of the fields of fifty colleges showed that the various materials for surface or porous soil were used in the following proportions and depths:

18 loam—8 inches
17 sandy loam—6 inches
7 clay—3 inches
5 clay and loam—4 inches
2 sand and clay—3 inches
1 pulverized slate—4 inches

For the second layer of retentive or impervious soil, the materials were used in the following proportions:

20 clay—4 inches
8 gravel—5 inches
5 sand—4 inches
4 stones—4 inches
2 sand and clay—3 inches
2 slate—2 inches
6 combinations

For the third layer crushed stone or a similar solid material partly pervious is recognized as the proper material to be used.

The conclusion has been reached from the data just given and from other investigations that the best arrangement for a field consists of eight inches foundation of crushed stone topped with four inches of clay and with a top layer of six inches of loam.

For a baseball in-field, it is suggested that the inside of the diamond be of turf with four inches of rich loam resting on a bed of clay. In the areas where the infielders play as well as on the base lines, clay mixed with loam in the proportion of one part of clay to three of loam, should make a satisfactory top

soil. The character of the clay, however, and the degree of stickiness must be deciding factors in determining the amount of these substances to be used.

Drainage There are two kinds of drainage, natural and artificial. Through natural drainage the water runs off the field because of the sloping ground or the water sinks into the ground because of a porous sub-stratum. In artificial drainage the water is taken care of by a system of channels, mains or pipes. For a field of scientific construction, natural drainage is not so satisfactory as artificial. The simplest form of artificial drainage is the open ditch running along one or both sides of a field. Of the fifty colleges investigated, however, only two reported this system of drainage.

These open drains should be distinguished from the more complete form of underground or covered drains which are simply open channels afterwards refilled except at the lower part, along which the channel is preserved by one of several methods of construction. The simplest method in the main, consists of filling the bottom of the dip with stones which are covered with loam.

Other methods of drainage call for a roughly constructed stone sluiceway at the bottom of the dip which is covered with loam. Where piping is not necessary, either of these two forms may be used with slight variations in the shape of the drain or sluiceway.

The most popular method in use in the fields of the fifty colleges investigated is the following: In view of the fact that the pitcher's plate should be fifteen inches higher than the base lines, it is well to drain the in-field from the pitcher's box to the base lines and short out-field, by running trap rock trenches eighteen inches below the surface from the pitcher's box to a ground trench running parallel to the base lines and just outside of them. The out-field may be drained in a similar manner from the right field, center field, and left field to trenches eighteen inches under ground. This method of drainage is necessary only where the bottom soil is heavy and impervious to water and calls for more or less scientific treatment.

Where the soil is naturally sandy the natural method of drainage may well prevail providing the diamond slopes grad-

ually from the pitcher's plate with a fifteen-inch drop to the base lines. For the construction of such a diamond the following method may be followed: Take off about eight inches of the sandy soil and put in eight inches of blue clay mixed with loam in the proportion of three parts of clay to one of loam. If this is rolled well into the sub-soil and graded as has been suggested, it should make a fast and smooth "skin" diamond without any grass. It is well to mix 300 to 400 pounds of salt with this mixture for the in-field.

SUGGESTIONS FOR THE CONSTRUCTION OF CLAY TENNIS COURTS*

The success of clay tennis courts depends to a very great degree on foundations and drainage and for this reason great care should be given to these two considerations in the constructing of courts.

The tennis court of the clay-gravel type consists of two layers of which the lower is the foundation and the upper the surfacing. The foundation is made up of what is known to road-builders as water-bound macadam, which consists of large, medium, and small stones mixed with sand by the action of water and rolled into a firm mass. The upper surface is composed of clay and sand mixed with shovels and spread over the foundation to make the playing surface.

First Steps in the Construction of Tennis Courts

Secure a civil engineer to find the grade or elevation level of the bottom of the foundation so as to determine how much material must be removed. The next step should consist of the driving in of about fourteen stakes for each court, locating one on each corner of the court and the other ten at intervals of twenty feet along each of the longer sides. The stakes, measuring two feet in length by two inches square, should be driven at least one foot into the ground so that they will not be knocked out of place. On them the elevation of the bottom should be marked, provision being made for a pitch of

* Suggestions drawn up from report of A. E. Metzdorf on Dubuque, Iowa.

from one inch to two inches from each of the back lines to the net.

Surfacing After the material has been removed to the proper depth for the foundation, the bottom should be rolled down hard with a good, heavy steam or horse roller so as to secure a hard level surface for the foundation. Over this foundation spread seven or eight inches of trap rock to about one and one-half to two inches in diameter. Roll lightly to render this fairly compact but not too close to fill up all the crevices formed by the uneven edges of the rock. Over this spread two inches of one-half to one inch trap rock which is to serve as a drain. Fill this in with pebbles or small cobblestones one to two inches in diameter and level to the grade. A half day's rolling should be given with a heavy roller, keeping constantly in mind the grade lines as this level should be as smooth and true to grade as the finished surface. This should prove sufficient to prepare the foundation for the final process in the construction of a water-bound macadam.

Next, spread coarse sand in thin layers over all and continue wetting it down and rolling it in with a hand roller or a light horse roller until no more sand is required to bind the stones together. Be sure that all the air spaces between the stones are filled up. The resulting surface should now be so hard that the imprint of a horse shoe will scarcely show. If possible allow this to harden in warm sunny weather for half a day.

Over this surface spread one inch of blue clay well dampened so that the roller will pass over it without picking it up. Roll well into the foundation in order to work it into it as much as possible and to form a union between the foundation and the last surfacing. Mix three parts of sand to one of clay, first wetting the clay so that it will resemble soft putty in consistency. Add 300 to 400 pounds of salt as a weed killer. When this has been thoroughly mixed together spread a layer four inches thick over the whole. The greatest care should be exercised to see that the material is so distributed as to keep the grade at all times. Roll this lengthwise and then crosswise with a hand-roller until the surface has been pressed down and made very compact. After it has dried, wet and repeat the rolling until

the desired surface has been secured. If high spots appear above the grade levels, wet them thoroughly and rub down with a heavy thick board on the end of a long pole until the surface is entirely level.

When the court is sufficiently dry fill in the one-foot strip under the net with screened cinders ranging from three-fourths inch at the bottom to very fine cinders at the top, covering the top with a layer of sand which should be rolled to the level of the court.

Before the court is thoroughly hard screen fine brown sand over the whole and roll well into the clay. This not only gives a better wearing surface but tones down the light color of blue clay when it dries.

Drainage

During rainy weather the water will run to the strip under the net and, owing to the pitch of the court to the net, will drain down out of the way. If the courts are pitched away from the net, the water will remain well in the back court where continued playing has worn away just enough of the surface to make a hollow which makes the courts unusable a day or two longer than if the pitch is towards the net.

If, however, the slope is too great to permit of drainage towards the net, it is advisable to pitch the courts toward the center with a one-inch drop towards the sides and a two-inch drop to the base lines, constructing trap rock and gravel basins between each set of courts and at the very edge of the plot parallel to the base lines.

Arrangements of the Courts

Courts should be placed so that they will lie north and south. The regular court measures seventy-eight feet in length by thirty-six feet in width. Fifteen feet for match games is the usual amount of space left behind the base line on either end—twenty-one feet for championship games. It is desirable, if possible, to leave ten feet between every two courts as this allows for plenty of space and permits of better drainage.

Back Stops and Fencing

When courts lie next to the street it is necessary to erect a higher screen along the street side than would otherwise be neces-

sary. Such screening should be fifteen feet in height, all other screening ten feet in height.

Galvanized iron piping covered with a heavy one-inch wire screening makes the most serviceable back stop and will outlast any other material which could be used for this purpose. The ground pipes should be set in concrete. The uprights should consist of two-inch pipe; the cross beams of one-inch to one and one-half inch pipe.

Water Pipes and Connections

While the excavating is being done it is advisable to lay any water pipes necessary arranging for a drinking fountain or bubbler in the center of the field.

WADING POOLS

A study of wading pools in eight cities visited by a worker of the Playground and Recreation Association of America shows a number of variations in the construction and use.

Although in all instances the pools were constructed of reenforced concrete of a finish somewhat rougher than that of the ordinary sidewalk, at least four different shapes were in use—the bowl shape pool, the oval, the round and the rectangular shaped pool. In the great majority of cases the intake and outlet were through the same opening at the deepest part of the pool. In two instances the intake was arranged for at the shallower end, the outlet at the deeper. More than half of the pools were circular in boundary; this arrangement has been found to be the more generally satisfactory plan. The pools were found to vary in depth from ten inches at the shallower end to twenty-five or thirty inches at the deeper.

The shading of the areas surrounding the wading pool, particularly the sand court, is a matter which frequently governs the shape of the pool. For example, the reason for the circular pools used in Chicago is not alone the fact that it sets off symmetrically the circular end of the men's outdoor running track, but also that it permits of the use of a semi-circular pergola and awning over the sand courts. This arrangement, if the awning is properly placed with respect to the compass points, admits of sand court

either in the shade or sunshine at the option of the child. Such an hour-glass shade idea, it is felt, is well worth taking into consideration in constructing the wading pool.

Elizabeth, New Jersey, Wading Pool

In Elizabeth, a pool has been constructed which has been found very satisfactory. It is oval in shape, forty-five feet long and twenty-five feet across—outside measurements. The floor slopes towards the center so that the maximum depth of the water will be sixteen inches. The curb, walls, floors, and walks, are not integral but were constructed separately. This arrangement, it was found, eliminated the cracking due to expansion.

The curb wall which is high enough to be used as a seat by the children, was built first of material composed of one part cement, three parts sand and five parts aggregate stone. The curb is also useful in preventing surface and waste water from seeping into the pool from the surrounding walks. Exposed parts of the wall are faced with a composition of one part cement and two parts sand with a certain amount of water proofing. All of the walls are re-enforced with steel bands.

After the walls were built the plumbing fixtures for the feed and drain pipes were installed. A six-inch layer of cinders was placed over the bed of the pool, the ground having first been tamped and a blind drain installed to prevent water settling under the floor. Over this layer of cinders was spread a five-inch layer of concrete re-enforced with electrically-welded wire mesh. The surface of the concrete was troweled hard and then flooded to make it "slip proof." The walks and the floor of the pool are of the same composition as the curb walls. The walk is graded away from the walls with a drop of one and one-half inches and a blind drain arranged to carry the water to the sewer opening. A bed in the center of the pool is so arranged as to catch all sand and prevent it from clogging the drain pipe.

The entire cost for the plumbing and mason work on this pool was $850.

Chicago Wading Pools

Mr. E. B. De Groot, formerly of the South Park Commission of Chicago, has suggested two methods of constructing wading pools. The first involves the scooping out of a small area of the play-

ground so that it resembles a saucer. At the lowest point a drain should be played which may be opened and closed at will; at the same point bring in a supply water pipe letting it extend a little higher than the grade line of the playground. This not only serves to fill the pool but makes an attractive fountain. The bottom of the saucer-like area should be covered with clay to keep the water from seeping through and torpedo sand spread over the clay to the depth of from four to six inches. The water should be drained off every few days and the empty pool permitted to bake in the sun.

Another way to construct a wading pool requires an excavation of a specified area and the building of a cement basin with an intake and outlet such as has been described. A cement pool, circular in form, with a diameter of forty feet, twenty-four inches deep at the center and eleven inches deep at the side, is in use at some of the Chicago centers. In filling a pool of this type, the water should be kept at a depth of eighteen inches in the center and five inches at the sides.

Sand courts adjacent to the wading pools are features in many playgrounds. Such courts should be open underneath for an occasional flushing to carry off waste and foreign matter. In a number of places where concrete bottoms have been built under the sand basing, the sand sewers have become foul through lack of filtration and drainage.

A number of people have felt that wading pools might well be made to serve as miniature bathing pools, suggesting that even though the pool is limited to a depth of twenty-five inches, the little people will still have excellent opportunities for learning to swim. On the other hand, there are playground officials who feel that such an arrangement is undesirable not only from the point of view of increased cost and the necessity of providing places where the children may dress, but because it is liable to prove very dangerous to the little people in that there is great risk of drowning accidents occurring.

Except in a very few instances it was found that the water was changed daily. All pools were drained after playground hours and were ready for use in the morning. One pool in Cincinnati, forty feet in diameter, can be drained, cleaned and refilled in four hours. It is desirable to arrange it so that the pool when empty shall have the benefit of the early morning sunshine.

The pool should be located near the field house or dressing

room. In this way problems of discipline and supervision may more easily be solved. It should be in as sunny a place as possible and away from the baseball field where the children will not be in danger.

A combination of wading pool and sand court with seats under a canopy when the mothers may sit while the children are at play, will provide a never failing source of enjoyment to the children and a social center for mothers.

THE PLAYGROUND would be very glad to have its readers discuss these problems and to learn of the experience which cities have had in the matter.

REGARDING APPARATUS

A study of playgrounds in twenty-six cities showed that many playground officials are still making use of home-made playground apparatus although in most instances this is being replaced by manufactured equipment as rapidly as funds will permit. In ten of the twenty-six cities visited by a worker of the Playground and Recreation Association of America, standard manufactured apparatus was used exclusively, in one, wooden home-made apparatus, and in thirteen a combination of wooden and manufactured.

A number of city departments have found that they can successfully and economically manufacture frames and fixings such as swing ropes, swing seats, rings and ring chains. Experience has shown that fixtures such as joints, couplings, eye fittings, and roller-bearing fittings, give better satisfaction if secured from manufacturers of standard apparatus. Where fixtures are home-made they should be made to fit the standard frame fittings.

Placing of Apparatus

The apparatus was in most cases placed at the sides or ends of the playground or at both sides and ends, the frame work lying parallel to the boundary lines. In some instances the playgrounds were filled with apparatus, little or no space being left for free play. Frequently it was found the apparatus was placed under the trees regardless of free play space, boundary lines or other considerations.

Anchoring of Apparatus

As far as can be ascertained, wooden swing frames were set into the ground to a depth of from three to four feet. There was no uniformity in the use of underground braces. The steel frames were uniformly set into concrete to a depth of from three to four and one-half feet.

Apparatus Found on the Various Playgrounds

The various pieces of apparatus found on the playgrounds were as follows:

Swings	were	included	on	213	playgrounds
Seesaws	"	"	"	168	"
Sand Boxes	"	"	"	134	"
Giant Strides	"	"	"	119	"
Basket Balls	"	"	"	99	"
Slides	"	"	"	95	"
Gymnasium Frames	"	"	"	54	"
Horizontal Bars	"	"	"	40	"
Tether Ball Poles	"	"	"	36	"
Volley Ball Courts	"	"	"	35	"
Tennis Courts	"	"	"	22	"
Teeter Ladders	"	"	"	19	"
Wading Pools	"	"	"	18	"
Rings	"	"	"	13	"
Swimming Pools	"	"	"	3	"

Popularity of Various Pieces of Apparatus

A study of the amount of use given the apparatus showed that swings, giant strides, rings, wading pools, swimming pools, and tennis courts were in constant use. Sand boxes, slides, gymnasium apparatus, and teeter ladders were on most playgrounds indifferently used. Basket ball, volley ball, seesaws, horizontal bars, and tether ball were unused except when a special effort was made by the play leader.

Construction of Swings

A twelve-foot frame for swings has been found very satisfactory. The experience of the various cities showed wooden seat swings should be six inches wide and one inch thick. On nine of the playgrounds

visited the swings were guarded by a low fence to reduce the number of accidents caused by children running in front of swings in motion. These guards were from two feet to three feet high and built of sticks with rope or wire stretched between.

Surfacing of Ground under Swings and Giant Strides

The materials used to prevent the wearing away of the ground underneath the swings and giant strides were cement, sand gravel, macadam or tan bark. It was the general feeling that cement was probably the most satisfactory as it proved easier to the children's feet, was not difficult to care for and was more lasting. The strips of cement running parallel to the frame work varied in width from three and one-half feet to four and one-half feet.

Care of Apparatus

In spite of the fact that equipment can be made to last much longer by giving attention to oiling and prompt repair of broken pieces, the amount spent upon the up-keep of apparatus seemed to vary in the different cities with the interest and feeling of responsibility on the part of the executive. The rule, which should be rigidly enforced, of a daily examination of bolts, ropes, and chains, was indifferently carried out and squeaking swings and missing parts of gymnastic frames were found in the majority of cities visited.

Drinking Fountains

It was found that in the cities visited little provision had been made for drinking water. Of two hundred and fifty-six playgrounds only twenty-two had special provision for drinking water. One hundred and nine were without water and the remaining one hundred and twenty-five used the facilities in adjoining recreation buildings or schools.

Difficulty in keeping the drinking fountains in repair was general, more as a result of stoppage of pipes with sand and food stuffs than because of the breaking of fixtures.

Toilet Facilities

Toilet facilities were provided on only forty-nine of the two hundred and fifty-six playgrounds visited. Eighty-two had no provision whatever and the remaining one hundred and twenty-five grounds made use of the facilities in adjoining recreation buildings or schools.

TRAINING CLASSES FOR PLAY LEADERS

Training classes for play leaders are fast coming to be a part of the recreation program of cities carrying on comprehensive plans for recreational activities. In the eleven cities visited by a worker of the Playground and Recreation Association of America classes are held for periods of time varying from one week to ten months, in a number of instances the classes being held just prior to the opening of the summer playground season. In other instances classes are given during the summer playground season and consist largely of instruction on immediate problems. In the majority of cities the classes are given by the superintendents of recreation.

A brief outline of the work as given in eleven cities is as follows:

Lynchburg, Virginia — Under the direction of the superintendent of recreation a two months' course meeting two hours a week is given to a class made up largely of college students, a number of whom put to good use the information gained through the course by starting playgrounds in their home towns during the summer vacation. Instruction is given in games, folk dancing, and other playground activities and opportunity for practice teaching on the playgrounds is offered. No examinations are required.

Cleveland, Ohio — For one week two to three hour daily sessions are held by the superintendent of recreation and the supervisor for special activities for applicants who have passed the civil service examinations. Attendance is required. The subject matter of the course includes five hours of lecture on theory of play and games, six hours lectures in playground organization, four hours of athletics and games with practical administration, four hours lectures and practice in construction activities such as building, whittling, and saw work, and two hours in gardening activities.

Wheeling, West Virginia — During the summer months the superintendent of recreation devotes one hour a week to lectures and conferences with the workers which take the form of an open forum for the discussion of immediate problems.

Washington, District of Columbia

The supervisor of girls' activities gives a course of lectures from March through June to the playground workers of the city whose attendance is required. There are two divisions of two three-hour sessions. Oral examinations are given. The course includes lectures in theory of play, practice demonstration of plays and games, folk dancing, storytelling, first aid, and hand work.

Red Bank, New Jersey

The superintendent of recreation has given courses in playground work extending over a period of six months. The class met for one and one-half hours once a week. The course which consisted of games, folk dancing, and practical demonstration was designed to educate the community and arouse interest rather than as a training class for specific positions.

Orange, New Jersey

During the summer months at one hour sessions held weekly the superintendent of recreation conducts discussions among the workers on problems arising each day in playground work.

Pittsburgh, Pennsylvania

The superintendent of recreation and the supervisors of special activities conduct a training course at which the attendance of the workers is required. The course which extends over a period of ten months meets weekly for a three-hour session. It includes lectures on the theory of playground work, practice work in teaching games and folk dancing. Special articles on different phases of the various activities are prepared by individual members of the class and submitted for general discussion. No examinations are required.

Cincinnati, Ohio

Previous to the holding of the civil service examinations required weekly sessions of two hours each are held for three months under the leadership of the superintendent of recreation and special lecturers. Lectures are given on the theory of playground work and games. There are, however, no practical demonstrations of games. During the summer months the superintendent has weekly conferences for the workers.

Sprinfield, Massachusetts For a period of two and a half months during the summer one-hour sessions are held weekly for the workers under the leadership of the superintendent of recreation who gives talks on the practical conduct of playground activities, including handwork. There are also general discussions of immediate problems. The attendance of the playground workers is required. No examinations are given.

Dayton, Ohio For ten weeks preceding the holding of examinations required courses are given weekly at two-hour sessions by the superintendent of recreation. The courses include lectures on the theory and practical conduct of playground activities. The subsequent examinations given to candidates for playground positions are based upon the subject matter offered in these courses.

Columbus, Ohio For three months at weekly two-hour sessions required courses are given by the superintendent of recreation, the supervisor of special activities, and by special lecturers to the candidates for playground positions. In addition to the lectures on theory and conduct of play and first aid, there are practical demonstrations of games and folk dancing. These courses with the subsequent probation period of three months of practice teaching secures for the candidate a playground position.

Playground Training
Pestalozzi-Froebel Training School
A Normal School for Playground Workers
Special Ten Weeks' Course for Teachers and Social Workers Begins January 6
Class Rooms overlook Lake Michigan Diploma two years, Folk Dancing, Pageantry, Games, Story Telling, Gymnastics, *Playground Practice*. Strong Faculty, Accredited. For *Illustrated Bulletin* address
REGISTRAR, Box 71
616-22 So. Michigan Blvd., CHICAGO, ILL.

BASKETRY MATERIALS for CRAFT WORKERS
Send for free Catalog! "EVERYTHING FOR BASKET MAKING." Reeds, Willow, Chaircane, Raffia. Indian Ash Splints, Braided Rush and Straw, Dyes and finishes, tools and Books of Instruction. Manual and Industrial Art Supplies of every description for schools and artists. Catalogue sent free.
Louis Stoughton Drake, Inc.
966 Watertown St., West Newton, Mass

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of THE PLAYGROUND, published monthly at Cooperstown, N. Y., for October 1, 1917.

State of New York }
County of New York } ss.

Before me, a Notary Public in and for the state and county aforesaid, personally appeared H. S. Braucher, who, having been duly sworn according to law, deposes and says that he is the editor of THE PLAYROUND and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Playground and Recreation Association of America, 1 Madison Ave., New York City; Editor, H. S. Braucher, 1 Madison Ave., New York City; Managing Editor, H. S. Braucher, 1 Madison Ave., New York City; Business Manager, H. S. Braucher, 1 Madison Ave., New York City.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock).

Playground and Recreation Association of America, 1 Madison Ave., New York City which is composed of about four thousand members. The following comprise the Board of Directors:

Richard C. Cabot, Boston, Mass.; Clarence M. Clark, Philadelphia, Pa.; Grenville Clark, New York City; Everett Colby, Newark, N. J.; Henry P. Davison, New York City; Mrs. E. P. Earle, Montclair, N. J.; Mrs. Thomas A. Edison, West Orange, N. J.; John H. Finley, Albany, N. Y.; Charles W. Garfield, Grand Rapids, Mich.; Robert Garrett, Baltimore, Md.; C. M. Goethe, Sacramento, Cal.; Mrs. Charles A. Goodwin, Hartford, Conn.; Austin E. Griffiths, Seattle, Wash.; J. M. Hankins, Birmingham, Ala.; Mrs. Appleton R. Hillyer, Hartford, Conn.; Mrs. Francis DeLacy Hyde, Plainfield, N. J.; Mrs. Howard Ives, Portland, Me.; William Kent, Washington, D. C.; Gustavus T. Kirby, New York City; G. M. Landers, New Britain, Conn.; H. McK. Landon, Indianapolis, Ind.; Joseph Lee, Boston, Mass.; Eugene W. Lewis, Detroit, Mich.; Edward E. Loomis, New York City; J. H. McCurdy, Springfield, Mass.; Otto T. Mallery, Philadelphia, Pa.; Samuel Mather, Cleveland, O.; R. B. Maury, Memphis, Tenn.; Walter A. May, Pittsburgh, Pa.; Carl E. Milliken, Augusta, Me.; F. Gordon Osler, Toronto, Canada; James H. Perkins, New York City; John T. Pratt, New York City; Ellen Scripps, La Jolla, Cal.; Clement Studebaker, Jr., South Bend, Ind.; F. S. Titsworth, Denver, Colo.; Harold H. Swift, Chicago, Ill.; Theodore N. Vail, New York City; Mrs. James W. Wadsworth, Jr., Washington, D. C.; J. C. Walsh, New York City; R. D. Waugh, Winnipeg, Canada; Harris Whittemore, Naugatuck, Conn.

3. That the known bond holders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities, are: There are none.

H. S. BRAUCHER,
Editor.

Sworn to and subscribed before me this 8th day of October, 1917.

(Seal) CHAS. R. QUERY.

Notary Public, Cert. filed in New York, Bronx and Kings Counties.

(My commission expires March 30, 1918).

When you want the best

specify SPALDING ALL-STEEL

Used year after year in the majority of the country's playgrounds

WRITE FOR CATALOG

A. G. Spalding & Bros. INCORPORATED

Chicopee, Mass.

Look for this Mark of Quality

CORONA

Is a six-pound silent partner that makes routine a habit.

With it your business reports and accounts as well as your personal correspondence are attended to promptly.

Corona eliminates worry.

Cost with case, $50.00

Write, phone or call for booklet

Corona Typewriter Co., Inc.
141 W. 42d St. Tel. Bryant 7150
Opposite Hotel Knickerbocker

Polite and Social Dances

For Festivals and Pageants, Schools and Playgrounds

MUSIC, DESCRIPTIONS, INSTRUCTIONS
OF ALL THE
HISTORIC DANCES

Compiled and Edited by
MARI RUEF HOFER

Price $1.00 net

Send for Circular

CLAYTON F. SUMMY CO.
PUBLISHERS
64 E. VanBuren St., Chicago

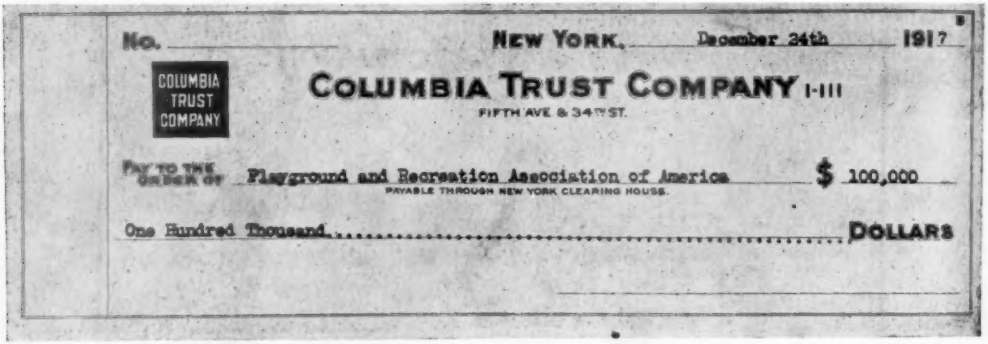
NEEDED $3,750,000

FOR THE

WAR-CAMP COMMUNITY-RECREATION SERVICE

Make checks payable to Charles H. Sabin, Treasurer, and mail to War-Camp Community-Recreation Fund, 19th and G Streets, N. W., Washington, D. C.

Who Will Sign This Check?


No.
NEW YORK, December 24th 1917
COLUMBIA TRUST COMPANY
COLUMBIA TRUST COMPANY I-111
FIFTH AVE. & 34TH ST.
PAY TO THE ORDER OF Playground and Recreation Association of America $ 100,000
PAYABLE THROUGH NEW YORK CLEARING HOUSE.
One Hundred Thousand DOLLARS

A Christmas Gift to the Children of Our Country.